AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended)

A compound of the formula I:

or a salt thereof, or a solvate thereof, or a solvate of a salt thereof,

in which

- R¹ represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group;
- X represents a carbon atom, a sulfur atom, a sulfoxide group S=O or a group PR³, P-O-R³ or P-N(R⁴)-R³ where R³ and R⁴ each independently represent a hydrogen

atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group;

- Z represents an oxygen atom, a sulfur atom or a group NR⁵ where R⁵ represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group; and
- represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralky group, or a group N(R⁶)₂, NHNH₂, NR⁶NHR⁶ or NR⁶N(R⁶)₂, or a group OR⁶ or SR⁶ where each R⁶ independently represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group, or a 10a-dihydroartemisinyl group, or R² represents a group OR⁷ or NR⁶R⁷ where R⁶ represents a group as defined above and R⁷ represents a bond attached as a substituent to R⁵ together with the group -X=Z- forming an optionally substituted heterocyclic group where Z represents a group NR⁵, or R² represents a bond attached as a substituent to R⁴ together with the group -N X(-Z) forming an optionally substituted heterocyclic group.
- 2. (Previously Presented) A compound according to claim 1 in which R¹ represents a hydrogen atom, a methyl group, ethyl group or longer straight-chain alkyl group or a branched alkyl group containing up to 9 carbon atoms.
- 3. (Previously Presented) A compound according to claim 1 in which X represents a carbon atom, a sulfur atom, or a group PR³, P-O-R³ or P-N(R⁴)-R³ where R³ and R⁴ each independently represent a C₆₋₁₈ aryl group or a 5- to 10-membered C-linked heteroaryl group or a 5- to 10-membered heterocyclyl-C₁₋₆ alkyl group optionally substituted by one or more substituents selected from the group consisting of halogen atoms, hydroxyl, C₁₋₄ alkyl, C₂₋₄ alkenyl, C₁₋₄ haloalkyl, C₁₋₄ alkoxy, C₁₋₄ haloalkoxy, amino, C₁₋₄ alkylamino, di(C₁₋₄ alkyl)amino and carboxyl groups.

- 4. (Previously Presented) A compound according to claim 1 in which Z represents an oxygen atom, or a group NR⁵ where R⁵ represents a hydrogen atom, a methyl group, ethyl group or longer straight-chain alkyl group or branched alkyl group containing up to 9 carbon atoms or a C₆₋₁₈ aryl group or a 5- to 10-membered C-linked heteroaryl group or a 5- to 10-membered heterocyclyl-C₁₋₆ alkyl group optionally substituted by one or more substituents selected from the group consisting of halogen atoms, hydroxyl, C₁₋₄ alkyl, C₂₋₄, alkenyl, C₁₋₄ haloalkyl, C₁₋₄ alkoxy, C₁₋₄ haloalkoxy, amino, C₁₋₄ alkylamino, di(C₁₋₄ alkyl)amino and carboxyl groups.
- 5. (Previously Presented) A compound according to claim 1 in which R² represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group, or a group OR⁶, SR⁶, NH₂, NHR⁶, or N(R⁶)₂ where each R⁶ independently represents a methyl group, ethyl group or longer straight-chain alkyl group or branched alkyl group containing up to 9 carbon atoms, or is a C₆₋₁₈ aryl group or a 5- to 10-membered C-linked heteroaryl group or a 5- to 10-membered heterocyclyl-C₁₋₆ alkyl group optionally substituted by one or more substituents selected from the group consisting of halogen atoms, hydroxyl, C₁₋₄ alkyl, C₂₋₄ alkenyl, C₁₋₄ haloalkyl, C₁₋₄ alkoxy, C₁₋₄ haloalkoxy, amino, C₁₋₄ alkylamino, di(C₁₋₄ alkyl)amino and carboxyl groups.
- 6. (Previously Presented) A compound according to claim 1 in which R¹ represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group; X represents a carbon, phosphorus or sulfur atom Z represents an oxygen atom or a group NR⁵ in where R⁵ represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group; and R² represents a group OR⁶, SR⁶, NH₂, NHR⁶, or NH², or N(R⁶)₂ where each R⁶ independently represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group, or a 10α-dihydroartemisinyl group.

- 7. (Previously Presented) A compound according to claim 1 in which R¹ represents a hydrogen atom, X represents a sulfoxide group S=O, Z represents an oxygen atom, and R² represents a group NH₂, or in which R¹ represents a hydrogen atom, X represents a carbon atom, Z represents a group NH, and R² represents a group NHR⁶ where R⁶ represents a hydrogen atom or an optionally substituted alkyl, cycloalkyl, aryl or aralkyl group; or in which R¹ represents a hydrogen atom, X represents a carbon atom, Z represents an oxygen atom, and R² represents a group NHR⁶ where R⁶ is a hydrogen atom or an optionally substituted alkyl, cycloalkyl, aryl or aralkyl group.
- 8. (Previously Presented) A process for the preparation of a compound of the general formula I according to claim 1 which comprises reacting a compound of the formula II comprising an atremisinin nucleus:

in which Y represents a group comprising an oxygen atom attached to the carbon atom of the artemisinin nucleus and also to a hydrogen atom or trimethylsiyl group, with a suitable halogenating agent to form a compound of the formula II in which Y represents a halogen atom; and, if desired, reacting the compound of formula II in which Y represents a halogen atom with an amine of the formula:

 $R^{1}NHX(=Z)R^{2}$

where R¹, R², X and Z are as defined in claim 1 to form a compound of the formula I.

USSN 10/506,926 Amendment Under 37 CFR § 1.116

- 9. (Canceled)
- 10. (Previously Presented) A pharmaceutical composition which comprises a carrier and a therapeutically effective amount of a compound according to claim 1.
- 11. (Canceled)
- 12. (Canceled)
- 13. (Previously Presented) A method for treating a disease caused by infection with a parasite which comprises administering to a host in need of such treatment a therapeutically effective amount of a compound according to claim 1.
- 14. (Previously Presented) A compound according to claim 2 in which R¹ represents a hydrogen atom, a methyl group or an ethyl group.
- 15. (Previously Presented) A compound according to claim 6 in which R¹ represents a hydrogen atom or an alkyl group; X represents a carbon or sulfur atom; Z represents an oxygen atom; R⁶ represents a hydrogen atom or an optionally substituted alkyl or aryl group; or R² represents a group NH₂ or a group NHR⁶ where R⁶ represents an alkyl group, or a group N(R⁶)₂ where R⁶ represents identical or different alkyl groups.
- 16. (Previously Presented) A compound according to claim 15 in which R¹ represents a hydrogen atom or a methyl group or an ethyl group; or R² represents a group NH₂, or a group NHR⁶ where R⁶ represents an alkyl group, or a group N(R⁶)₂ where R⁶ represents identical or different alkyl groups.